### New Britain-Hartford Busway Hartford, Connecticut

(November 2002)

#### **Description**

The Connecticut Department of Transportation (ConnDOT) is proposing the New Britain-Hartford Busway, a 9.4-mile, 12-station busway to operate on existing and abandoned railroad right-of-way between downtown New Britain and Union Station in Hartford. The proposed New Britain Hartford Busway is intended to expand interregional transit service. In addition, the busway will improve access to suburban employment and educational opportunities such as the Central Connecticut State University East Street station site for inner city residents.

The transportation benefits the Hartford Busway project will provide are improved bus service in the region by increasing travel speeds and improving reliability over conventional on-street bus or express routes. The project will also provide an alternate transit mode for those who use I-84 and parallel arterials.

### **Summary Description**

**Proposed Project:** Bus Rapid Transit

9.4 miles, 12 Stations

Total Capital Cost (\$YOE): \$160.0 Million

Section 5309 New Starts Share (\$YOE): \$79.4 Million (50%)

Annual Operating Cost (2004 \$YOE): \$12.8 Million

Ridership Forecast (2020): 8,800 Average Weekday Boardings

3,700 Daily New Riders

**Opening Year Ridership Forecast:** N/A

FY 2004 Finance Rating: Medium

FY 2004 Project Justification Rating: Not Rated

FY 2004 Overall Project Rating: Not Rated

This project has not been rated. The project sponsor calculated the project's cost effectiveness at \$4.50 per hour of transportation system user benefit. However, FTA has serious concerns about the information submitted for this measure; the underlying assumptions used by the project sponsor may have produced an inaccurate representation of the benefits of the project. FTA continues to work with this project sponsor to validate the assumptions, information, and projections. A rating for this project will be made available to Congress and other interested parties when the issues are resolved.

The overall project rating applies to this *Annual Report on New Starts* and reflects conditions as of November 2002. Project evaluation is an ongoing process. As New Starts projects proceed through development, the estimates of costs, benefits, schedules, and impacts are refined. The FTA ratings and recommendations will be updated annually to reflect new information, changing conditions, and refined financing plans.

#### **Status**

In 1996, ConnDOT, the Capitol Region Council of Governments (CRCOG) and the Central Connecticut Regional Planning Agency (CCRPA) initiated a Major Investment Study (MIS) for the Hartford West corridor. The study was completed in July 1999. In March of 1999, the Locally Preferred Alternative was selected by CRCOG and included in the long range transportation plan.

FTA approved the busway project's entrance into Preliminary Engineering in January 2000. The Final Environmental Impact Statement (FEIS) was completed in March 2002. The busway project is scheduled to request entry into Final Design in Spring 2003. The ConnDOT project anticipates starting construction on the busway project in April 2004.

The New Britain-Hartford Busway is not authorized for Section 5309 New Starts funds in the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21). Through FY 2002, Congress has appropriated \$1.49 million in Section 5309 New Starts funding for this project. In addition, \$8.9 million was appropriated from Section 5309 Bus Discretionary funds in FY 2002.

#### **Evaluation**

The following criteria have been estimated in conformance with FTA's *Reporting Instructions for the Section 5309 New Starts Criteria*, updated in June 2002. N/A indicates that data are not available for a specific measure. The project will be reevaluated when it is ready to advance to Final Design and for next year's *Annual Report on New Starts*.

Project Justification Quantitative Criteria			
Mobility Improvements Rating: Not Rated			
	New Start vs. Baseline		
Average Employment Per Station	0		
Average Low Income Households Per Station	365		
Transportation System User Benefit Per Project		_	
Passenger Mile (Minutes)	Not Rated		
Environmental Benefits Rating: High			
Criteria Pollutant Reduced (tons)	New Start vs. Baseline		
Carbon Monoxide (CO)	269		
Nitrogen Oxide (NO <sub>x</sub> )	40		
Hydrocarbons	N/A		
Particulate Matter (PM <sub>10</sub> )	0		
Carbon Dioxide (CO <sub>2</sub> )	12,158		
Annual Energy Savings (million)	160.004		
BTU	160,084		
Cost Effectiveness Rating: Not Rated			
	New Start vs. Baseline		
Cost per Transportation System User Benefits	Not Rated		
(current year dollars/hour)			
Operating Efficiencies Rating: Medium			
	<b>Baseline</b>	New Start	
System Operating Cost per	\$0.74	\$0.68	
Passenger Mile (current year dollars)			
1 Indicate an increase in emissions			

<sup>[ ]</sup> Indicate an increase in emissions.

# **Project Justification Rating: Not Rated**

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### **Existing Land Use, Transit-Supportive Land Use Policies and Future Patterns Rating: Medium**

The *Medium* rating reflects the concentrations of development at both ends of the proposed investment in downtown New Britain and downtown Hartford. Policies to encourage transit supportive land use in the corridor are still at a very early form. Full coordination of land use plans among the five communities served by the proposed busway is still limited.

Existing Conditions: The proposed corridor will connect the central business districts (CBD) in Hartford and New Britain. With the exception of the two downtown areas, the existing station areas are dominated by low to medium density residential uses. In West Hartford and Newington, development along the busway corridor is low-density residential and industrial, with some suburban "big-box" retail. There are a total of 20,300 households within 1/2 mile of the 12 stations. The number of housing units in 1995 was 21,200 and is expected to rise to 25,300 in 2020. Pedestrian accessibility is good within the two CBDs, but the pedestrian environment declines throughout the middle portion of the busway corridor. Most of the stations are close, if not parallel, to major roads and highways, making access to the stations relatively convenient to auto and pedestrian modes. Parking is generally available in all station areas. While parking is more constrained and transit-oriented in the downtown areas of the corridor, this is appropriate to the dense, urban character of these environments.

Future Plans, Policies and Performance: The City of Hartford has adopted an "Economic and Urban Design Action Strategy" to encourage redevelopment within the CBD. Projects such as a sports arena, residential development, a community college and other large developments in downtown Hartford are being proposed. The state has committed \$325 million to redevelopment projects in downtown Hartford, while the Parkville neighborhood has received a Transportation Community and System Preservation (TCSP) program grant from the United States Department of Transportation (USDOT). In West Hartford, an overlay district favoring high-density development has been improved, and New Britain is also actively encouraging redevelopment of its downtown area. The City of Hartford recently passed a resolution recommending that all plans for the Charter Oak Terrace area take into account the proposed busway station and transit oriented development (TOD). With the exception of this recent Hartford legislation for the Charter Oak Terrace area, policies for station area development are still being developed. The corridor demonstrates significant development opportunity on the vacant and industrial land in the corridor. Specific development opportunities are now being identified.

#### **Other Factors**

**FTA BRT Demonstration Program**: In August 1999, the New Britain-Hartford Busway was selected as one of FTA's ten Bus Rapid Transit (BRT) Demonstration Projects. FTA's BRT Demonstration Program is intended to foster the development of BRT systems in the United States; address BRT planning, implementation, and operational issues; and evaluate system performance in a wide range of operating environments.

**Transportation Community and System Preservation (TCSP) Program:** In June 1999, the Parkville Community within Hartford was awarded a Transportation Community and System

Preservation (TCSP) Pilot Program Grant to undertake coordinated transportation and land use planning activities.

#### **Local Financial Commitment**

#### **Rating: Medium**

The *Medium* local finance commitment rating was determined by the *Medium* rating for the capital finance plan

# Proposed Non-Section 5309 New Starts Share of Total Project Costs: 50% Rating: Medium

The State of Connecticut DOT will provide funding from its Special Transportation Fund. In addition CMAQ funds, FTA Section 5307 formula funds, Section 5309 bus discretionary funds and Federal Highway Administration (FHWA) - National Highway System (NHS) funds are proposed to cover the remaining project capital needs.

<b>Locally Proposed Financial Plan</b>			
Proposed Source of Funds	<u>Total Funding</u> (\$million)	Percent of Total	
Federal:			
Section 5309 New Starts	\$79.4	49.6%	
Formula FTA Section 5307			
Urbanized Area Formula	\$9.8	6.1%	
FTA Section 5309 Bus			
Discretionary Funds	\$13.2	8.3%	
FHWA-NHS	\$12.8	8.0%	
FHWA-CMAQ	\$12.8	8.0%	
State:			
ConnDOT	\$32.0	20.0 %	
Total:	\$160.0	100.0 %	

**NOTE:** Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Total may not add due to rounding.

# Stability and Reliability of Capital Financing Plan <a href="Rating: Medium">Rating: Medium</a>

The *Medium* rating reflects the strong financial condition of ConnDOT; however the adequacy of the project's financial plan at this stage of development needs improvement. The capital plan is missing several key components.

**Agency Capital Financial Condition:** ConnDOT funds public transit operations and facilities in Hartford. The average bus fleet age for ConnDOT's Hartford Bus Division was six years. Tax Obligation Bonds issued in 2000 were rated A1 by Moody's and AA by both Standard and Poor's and Fitch. In addition, the agency's Special Transportation Fund was estimated at \$858.2 million.

Cost Estimates and Contingencies: The current capital cost estimate of \$160.0 million is based on the latest project definition from the PE/EIS study phase. Cost estimates and contingencies require attention, especially considering the recent increase in capital costs of nearly 100 percent from the planning estimate of \$82 million. The current cost estimate includes 12 stations, right-of-way acquisition and construction, bus procurement, miscellaneous items, design services, and a multi-use trailand. The capital cost estimate also includes a contingency of 20 percent, which is adequate for this phase of development.

**Existing and Committed Funding:** The Non-Section 5309 New Starts funding for the proposed busway project, totaling \$80.6 million, is from existing Federal and State sources. ConnDOT's Transportation funds will cover the majority of the Non-Section 5309 funding amount with additional contributions from other Federal sources including NHS funds, CMAQ and formula funds. ConnDOT's contribution towards the project is \$32.0 million and these funds appear to be committed, although little documentation was provided. Before approval of Final Design, the project sponsor needs to submit a more detailed finance plan that clarifies key funding components and commitments.

**New and Proposed Sources:** No new funding sources are proposed for this project.

## Stability and Reliability of Operating Finance Plan Rating: Medium

The *Medium* rating reflects the stable operating condition of ConnDOT. Proposed revenues to operate the busway are considered reliable.

**Agency Operating Financial Condition:** The operating financial plan for the project and system was not recently updated; however the project cash flow includes several years of historical revenues and expenses for the project, demonstrating a long commitment to public transit operations within the ConnDOT budget. The Special Transportation Fund (SPF) identifies many revenue sources, cumulative positive balances and the commitment to funding public transit operations statewide.

Operating Cost Estimates and Contingencies: Annual operating expenses for current bus transit services in the New Britain-Hartford region are about \$40 million with a farebox recovery ratio of 33 percent. It is projected that the average annual operating cost for the project will be \$7.8 million when the project becomes operational in 2006, thereby increasing the operating costs of the region's transit system to about \$48.7 million and reducing the farebox recovery ratio to 28 percent. The data provided is at a summary level only, it generally reflects the project's present stage of development and is in line with current expenditure and subsidy rates. About \$5.7 million in annual subsidy will come from the STF, which is well financed and could potentially absorb increases in operating subsidies.

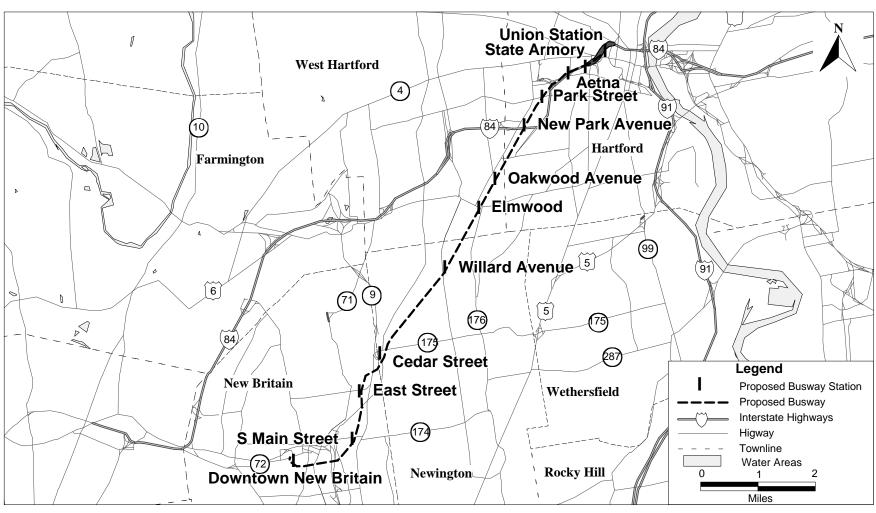
#### **Existing and Committed Funding:**

ConnDot projects \$2.1 million (27 percent) in farebox revenues and \$5.7 million (73 percent) in annually appropriated STF funds to cover the annual operating costs for the project. Although the ConnDOT Special Transportation Fund is well financed and has demonstrated a long-term commitment to public transit investments and operating subsidies before approval of Final Design, the project sponsor needs to submit a finance plan that clarifies key funding components.

New and Proposed Funding Sources: No new funding sources are proposed for this project.

### **New-Britain - Hartford Busway**

### Hartford, Connecticut



 $Federal\ Transit\ Administration,\ 2002$